FIG. 1

SYSTEM CONFIGURATION EXAMPLE

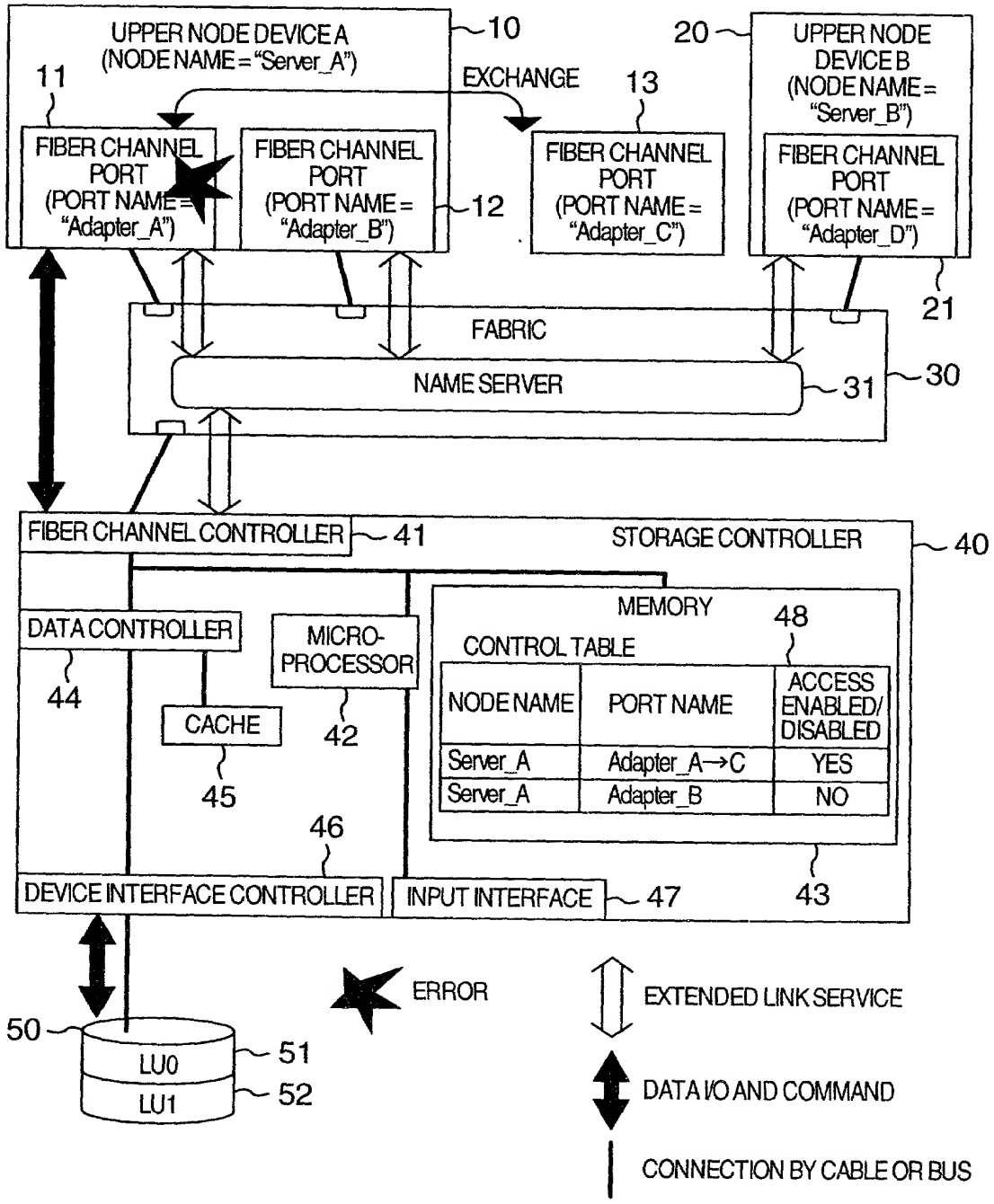


FIG. 2

CONTROL TABLE CREATION SEQUENCE

61 ENTER A PORT NAME OF A FIBER CHANNEL PORT ALLOWING I/O

62 FETCH PORT ID'S OF DEVICE SUPPORTING SCSI_FCP AND NODE NAME THERE OF BY GNN_FT

63 REPEAT GPN_ID (ENTER PORT ID'S FETCHED IN STEP 62) AND IDENTIFY PORT ID OF FIBER CHANNEL PORT ALLOWED IN STEP 61

64 IDENTIFY NODE NAME FOR PORT ID SPECIFIED IN STEP 63 USING INFORMATION OBTAINED IN STEP 62

65 USE INFORMATION OF STEP 62 TO LIST UP PORT ID'S OF FIBER CHANNEL PORTS OF THE NODE NAME SPECIFIED IN STEP 64

66 REPEAT GPN_ID (ENTER PORT ID'S LISTED UP IN STEP 65) AND FETCH PORT NAMES

67 CREATE A CONTROL TABLE USING INFORMATION OF STEPS 61 AND 66

- FIBER CHANNEL PORT ALLOWED FOR I/O IN STEP 61 : ENABLED FOR ACCESS? =YES
- FIBER CHANNEL PORT ON THE SAME UPPER NODE DEVICE AS THE AFOREMENTIONED FIBER CHANNEL PORT : ENABLED FOR ACCESS? =NO
- THE OTHER FIBER CHANNEL PORTS : NOT TO BE LISTED UP

CONTROL TABLE

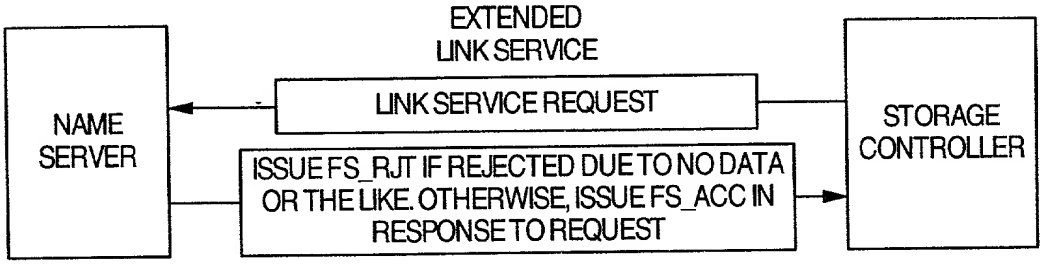
NODE NAME	PORT NAME	ACCESS ENABLED / DISABLED
Server_A	Adapter_A	YES
Server_A	Adapter_B	NO

3/6

FIG. 3

EXTENDED LINK SERVICE USED FOR SECURITY INFORMATION MANAGEMENT

68



69 GNN_FT (GET NODE NAME BY FC-4 TYPE) REQUEST PAYLOAD

BYTE \ BIT	0 7	8 15	16 23	24 31
0-3	RESERVED	DOMAIN_ID	AREA_ID	FC-4 TYPE

FC-4 TYPE : 08h IN SCSI

FS_ACC ACCEPT PAYLOAD

BYTE \ BIT	0 7	8 15	16 23	24 31
0-3	RESERVED	PORT_ID #1		
4-7	RESERVED			
8-11	PORT NAME #1			
12-15				
16-19	CONTROL	PORT ID #2		
20-23	RESERVED			
24-27	PORT NAME #2			
28-31				
:	:			

70 GPN_ID (GET PORT NAME BY PORT ID) REQUEST PAYLOAD

BYTE \ BIT	0 7	8 15	16 31
0-3	RESERVED	PORT_ID (24 BIT)	

FS_ACC ACCEPT PAYLOAD

BYTE \ BIT	0 15	16 31
0-3	PORT_NAME (64 BIT)	
4-7		

71 GNN_ID (GET NODE NAME BY PORT ID) REQUEST PAYLOAD

BYTE \ BIT	0 7	8 15	16 31
0-3	RESERVED	PORT_ID (24 BIT)	

FS_ACC ACCEPT PAYLOAD

BYTE \ BIT	0 15	16 31
0-3	NODE_NAME (64 BIT)	
4-7		

FIG. 4

DATA TRANSFER SEQUENCE EXAMPLE

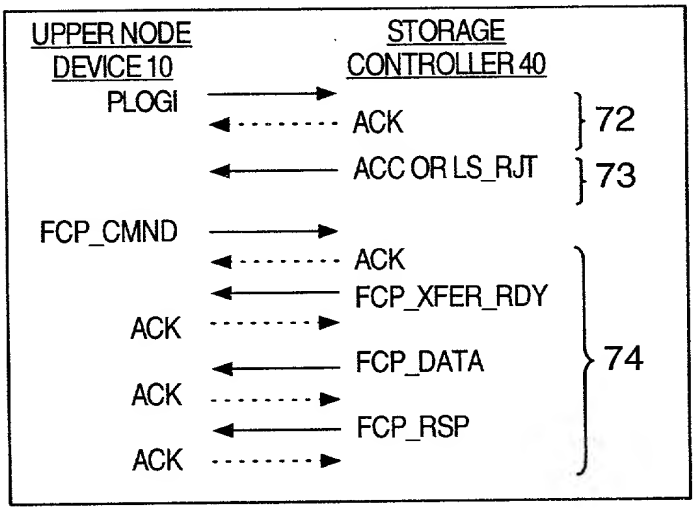


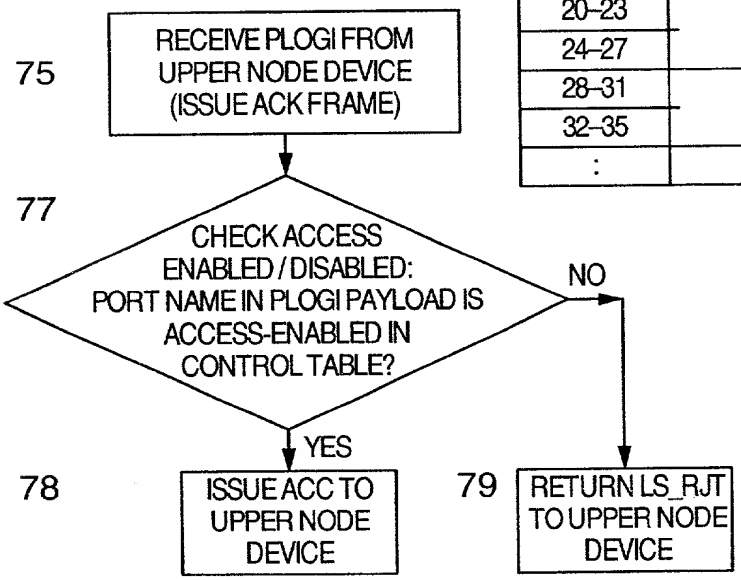
FIG. 5

SEQUENCE FOR CHECKING PORT NAME IN PAYLOAD

PART OF PLOGI PAYLOAD

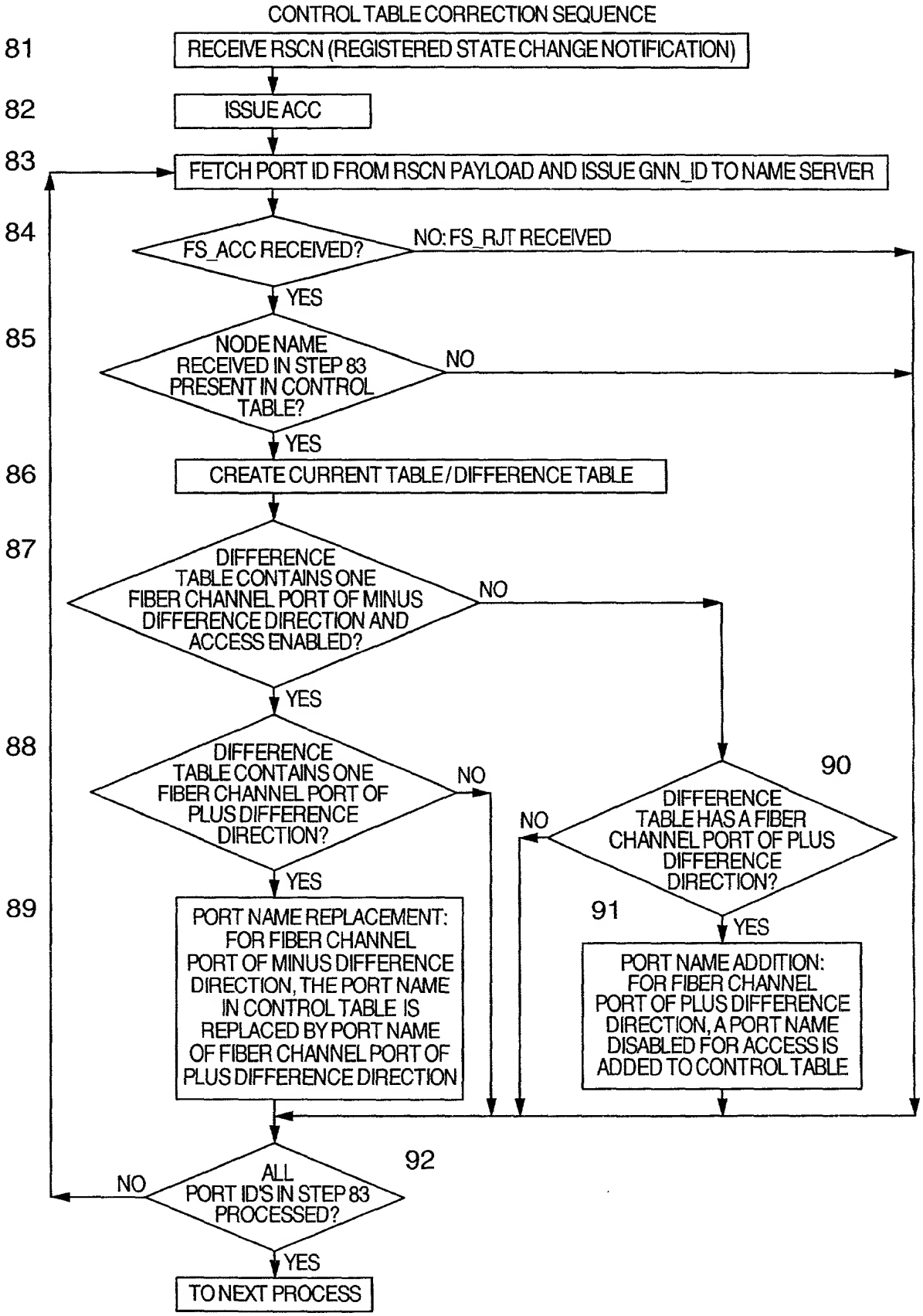
BYTE \ BIT	0 31
0–3	LINK SERVICE COMMAND CODE
4–7	COMMON SERVICE PARAMETERS
8–11	
12–15	
16–19	
20–23	PORT NAME
24–27	
28–31	NODE NAME
32–35	
:	

76



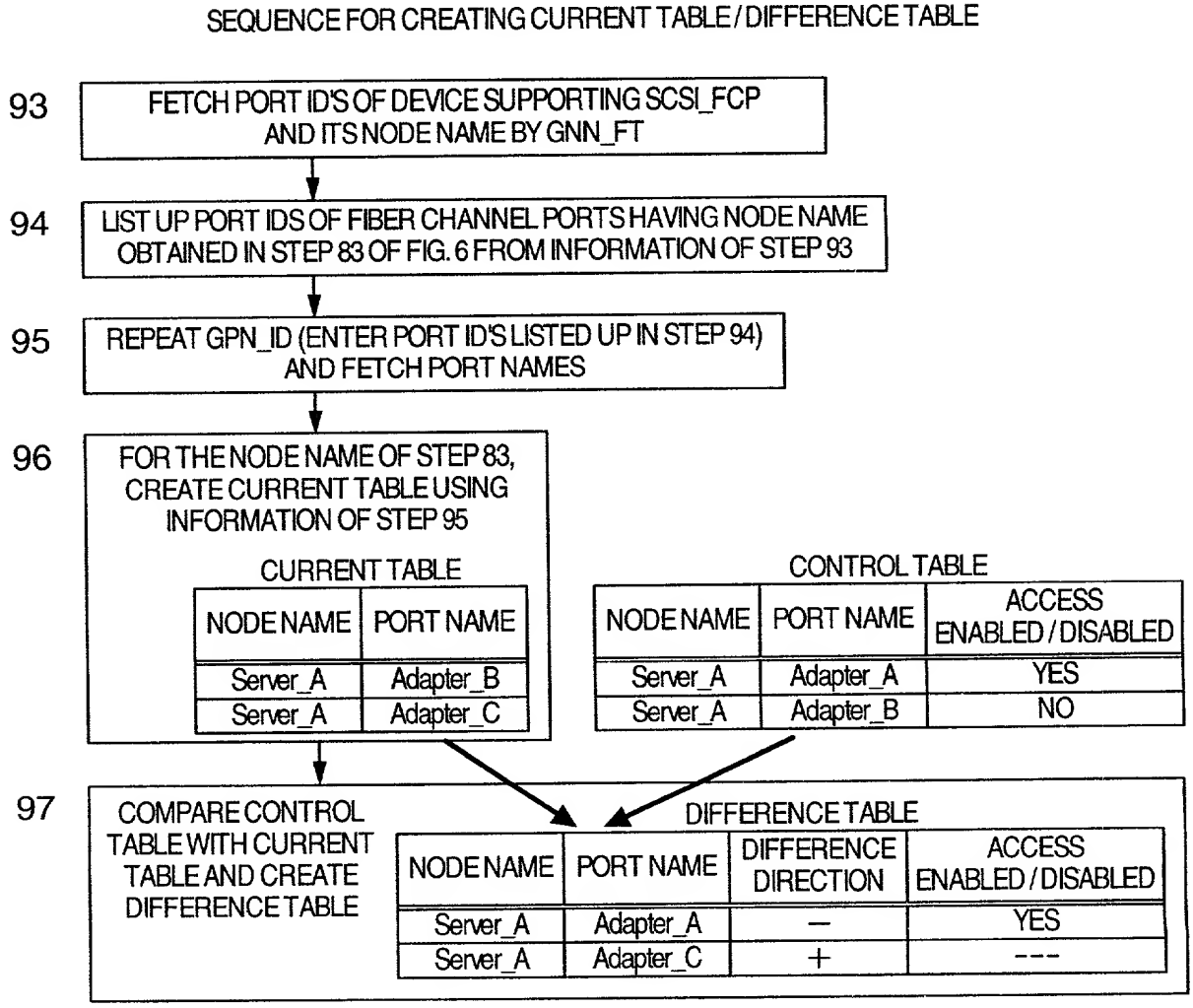
5/6

FIG. 6


CONTROL TABLE CORRECTION SEQUENCE
81
RECEIVE RSCN (REGISTERED STATE CHANGE NOTIFICATION)
82
ISSUE ACC
83
FETCH PORT ID FROM RSCN PAYLOAD AND ISSUE GNN_ID TO NAME SERVER
84
FS_ACC RECEIVED?
NO: FS_RJT RECEIVED
YES
85
NODE NAME RECEIVED IN STEP 83 PRESENT IN CONTROL TABLE?
NO
YES
86
CREATE CURRENT TABLE/DIFFERENCE TABLE
87
DIFFERENCE TABLE CONTAINS ONE FIBER CHANNEL PORT OF MINUS DIFFERENCE DIRECTION AND ACCESS ENABLED?
NO
YES
88
DIFFERENCE TABLE CONTAINS ONE FIBER CHANNEL PORT OF PLUS DIFFERENCE DIRECTION?
NO
YES
89
PORT NAME REPLACEMENT: FOR FIBER CHANNEL PORT OF MINUS DIFFERENCE DIRECTION, THE PORT NAME IN CONTROL TABLE IS REPLACED BY PORT NAME OF FIBER CHANNEL PORT OF PLUS DIFFERENCE DIRECTION
90
DIFFERENCE TABLE HAS A FIBER CHANNEL PORT OF PLUS DIFFERENCE DIRECTION?
NO
91
YES
PORT NAME ADDITION: FOR FIBER CHANNEL PORT OF PLUS DIFFERENCE DIRECTION, A PORT NAME DISABLED FOR ACCESS IS ADDED TO CONTROL TABLE
92
ALL PORT ID'S IN STEP 83 PROCESSED?
NO
YES
TO NEXT PROCESS

6/6

FIG. 7


SEQUENCE FOR CREATING CURRENT TABLE / DIFFERENCE TABLE
93
FETCH PORT ID'S OF DEVICE SUPPORTING SCSI_FCP AND ITS NODE NAME BY GNN_FT
94
LIST UP PORT IDS OF FIBER CHANNEL PORTS HAVING NODE NAME OBTAINED IN STEP 83 OF FIG. 6 FROM INFORMATION OF STEP 93
95
REPEAT GPN_ID (ENTER PORT ID'S LISTED UP IN STEP 94) AND FETCH PORT NAMES
96
FOR THE NODE NAME OF STEP 83, CREATE CURRENT TABLE USING INFORMATION OF STEP 95
CURRENT TABLE
NODE NAME | PORT NAME
Server_A | Adapter_B
Server_A | Adapter_C
CONTROL TABLE
NODE NAME | PORT NAME | ACCESS ENABLED / DISABLED
Server_A | Adapter_A | YES
Server_A | Adapter_B | NO
97
COMPARE CONTROL TABLE WITH CURRENT TABLE AND CREATE DIFFERENCE TABLE
DIFFERENCE TABLE
NODE NAME | PORT NAME | DIFFERENCE DIRECTION | ACCESS ENABLED / DISABLED
Server_A | Adapter_A | — | YES
Server_A | Adapter_C | + | ---